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REMARKS

Applicant respectfully requests reconsideration of the application. Applicant thanks the Examiner for the courtesy of conducting a phone interview with the undersigned attorney for applicant, Joel Meyer, on February 9, 2005.

Interview Summary

In the phone interview, the claim rejections under Section 112 were discussed, and in particular, the terms "quality" and "criteria." Applicant's representative asked for clarification about these terms, and the issues of subjective terminology and claim scope were discussed. No agreement was reached.

IDS

Applicant is preparing to submit an IDS along with a list of references, including the references listed on page 2 and 7 of the specification. In the phone interview, the Examiner indicated that he had reviewed references cited in the specification. The Examiner is requested to acknowledge that he has considered these and the other references in the IDS. If the IDS papers have not been matched with the file by the time the Examiner considers this response, the Examiner is requested to call the undersigned at (503) 469-4655.

Drawings

Fig. 1 is objected to as having a reference, "101," that is not mentioned in the description. The specification has been updated to include reference 101 in connection with the term label in the description of Fig. 1.

Specification

Applicant has made minor amendments to correct typographical and grammatical errors in the specification.

Claims**Objections**

The objections to the claims based on informalities noted by the Examiner should be addressed by the above claim amendments.

Rejections

Applicant respectfully traverses the rejections of the claims under 35 U.S.C. Sections 112 and 103. The claims have been re-cast such that they are directed to alternative aspects of the

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invention. Therefore, the rejection to the claims under 35 U.S.C. Sections 112 and 103 should be moot. The amended claims are distinguished from the cited art below.

Claims 1-3 and 5-18 are rejected under 35 U.S.C. Section 103(a) as being unpatentable over U.S. Patent No. 5,915,027 to Cox et al. ("Cox") in view of U.S. Patent No. 5,488,223 to Austin et al. ("Austin"). Claim 4 is rejected under 35 U.S.C. Section 103(a) as being unpatentable over Cox, Austin and U.S. Patent No. 5,249,053 to Jain ("Jain").

Claim 1

The combined teachings of Cox and Austin fail to teach or suggest "determining an extent to which the digital watermark is detected in the areas as a measure of quality of the printing" in the novel combination of elements recited in claim 1. Cox teaches combining parts of an image to facilitate extraction of watermark symbols. In contrast, the method of claim determines an extent to which the digital watermark is detected in the areas as a measure of quality of printing. Austin also fails to teach this aspect of using detection of a redundant signal across areas of a printed image as a measure of quality. Austin's method is localized to specific area where a bar code is located. Therefore, even if combined, the references do not teach all of the elements of claim 1.

There is no motivation to combine Cox and Austin. Cox makes no reference to a watermark that can be used in print media as claimed. Austin focuses on reading a particular, spatially localized feature, not on the quality of printing over areas of a printed image. The combination of these references is derived more from hindsight given the invention rather than any particular motivation from teachings in Cox or Austin. For example, Cox makes no suggestion that the watermark detection could be used to assess printing quality. Austin makes no suggestion of checking areas beyond a specific, localized area of the bar code. In sum, the references do not render claim 1 obvious.

Claim 8

The combined teachings of Cox and Austin fail to teach "reading said watermark signal from said second image to compute a measure of the digital watermark signal strength embedded in the second image, and determining quality of said printing from the measure of the digital

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watermark strength” as recited in claim 8 in combination with the other claim elements. Again, Cox provides no suggestion regarding the use of its teachings for print. Neither reference teaches a measure of embedded signal strength as a measure of print quality.

Claim 15

Regarding claim 15, the combined teachings of Cox and Austin fail to teach: “code for examining magnitude of the digital watermark signal in said areas as a measure of quality of said printing.” Moreover, Cox provides no teaching regarding use of his technology in print.

Claim 17

Regarding claim 17, the combined teachings of Cox and Austin fail to teach: “means for determining an extent to which the watermark signal is detected in the areas as a measure of print quality of said labels.”

The dependent claims are patentable for the same reasons as the corresponding independent claims, and include additional distinguishing elements.

New claims are similarly patentable over Cox and Austin because these references fail to teach all of the elements of these claims.


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Customer Number 23735

Telephone: 503-469-4800
FAX: 503-469-4777

Respectfully submitted,

DIGIMARC CORPORATION

By 
Joel R. Meyer
Registration No. 37,677